

REMARKS

Claims 1-73 are all the claims presently pending in the application. By this Amendment, various claims are amended. The amendments introduce no new matter.

It is noted that the claim amendments, if any, are made only to assure grammatical and idiomatic English and improved form under United States practice, and are not made to distinguish the invention over the prior art or narrow the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-2, 5-8, 10-13, 16, 18-21, 24-27, 29-32, 35, 37-40, 43-50, and 53-73 stand rejected under 35 U.S.C. §103(a) over Veerasamy, et al. (US Pat. App. Pub. No. 2004/0203855), in view of Desgagne (US 6,047,191). Claims 3-4, 9, 14-15, 17, 19, 22-23, 28, 33-34, 36, 41-42, and 51-52 stand rejected under 35 U.S.C. §103(a) over Veerasamy in view of Desgagne, and further in view of well known prior art (MPEP 2144.03).

These rejections are respectfully traversed in the following discussion.

The Claimed Invention

The claimed invention is directed to a method of collecting information used for adjustments with an information collecting server in a radio communication system connected to at least one mobile radio terminal for performing user communications.

The method includes, in said mobile radio terminal, monitoring a communication status, detecting a trigger, acquiring a reception status, acquiring a coordinate position, and sending information.

The monitoring is of a communication status of a communication connection using a traffic channel. The communication status corresponds to whether or not the mobile radio terminal has an existing communication connection using the traffic channel which satisfies predetermined criteria.

The trigger is detected when a change of the communication status has satisfied a predetermined condition.

The coordinate position is a geographic location of the mobile radio terminal.

The information includes the reception status and the coordinate position. The information is sent to the information collecting server.

THE PRIOR ART REFERENCES

The Veerasamy Reference

All claims rejected herein stand rejected under 35 U.S.C. §103(a) over Veerasamy in view of Desgagne, or over Veerasamy in view of Desgagne and further in view of well known prior art. Applicant respectfully traverses these rejections.

The Examiner alleges that Veerasamy discloses certain features of the claimed invention. Applicant submits, however, that there are features of the claimed invention which are neither disclosed nor suggested by Veerasamy.

The features of this invention are “acquiring a reception status of a radio signal” and “sending said reception status to said information collecting server.” However, Veerasamy neither discloses nor suggests the features. The Examiner appears to hold the position that “measuring the signal strength” as disclosed in Desgagne corresponds to the features of the present invention, and therefore thought that the present invention might be obvious over the

combination of Veerasamy and Desgagne. However, Applicant submits that the Examiner's position is unsupported, for at least the following reasons.

Veerasamy discloses that when a call drop or a service drop occurs at a mobile station, the mobile station relays a GPS position and/or time information to a server of a system for establishing a map of the coverage area. To detect RF coverage holes, the mobile station measures the information and reports in to the server of the system. Therefore, the mobile station does not use the information by itself, but the system uses the information.

On the other hand, Desgagne discloses that a mobile station measures a signal strength of a voice channel when selecting the voice channel. The mobile station attempts to select a better quality voice channel based on the measured signal strength. The mobile station uses the measured information by itself. Therefore, the mobile station does not report the measured information to a system. Desgagne neither discloses nor suggests that the mobile station send information to the system.

Therefore, there is no motivation to combine Desgagne and Veerasamy because Desgagne has no need to send the measured signal strength to the server. So, it is not possible for a person skilled in the art to combine Veerasamy with Desgagne in the manner urged by the Examiner.

With further regard to independent claim 8, Veerasamy and Desgagne fail to disclose or suggest at least "A method of collecting information used for adjustments with an information collecting server in a radio communication system connected to at least one mobile radio terminal for performing user communication, comprising: in said information collecting server, sending a trigger command simultaneously to the at least one mobile radio terminal; in said mobile radio terminal, in response to said trigger command: acquiring a

reception status of a radio signal; acquiring a coordinate position of said mobile radio terminal; and sending information including said reception status and said coordinate position to said information collecting server; and recording said information received from said mobile radio terminal,” as recited in the claim. Independent claims 12, 27, 31, 46, and 49 recite a similar feature and are traversed on substantially similar basis.

The Examiner has failed to indicate with specificity where the feature, “in said information collecting server, sending a trigger command simultaneously to the at least one mobile radio terminal,” is allegedly disclosed or suggested in the references.

Instead, the Examiner has alleged only, “*claim 8 recites feature analogous to the features of claim 1.*” Office Action, p. 5.

However, no such feature of the information collecting server sending a trigger command simultaneously to the at least one mobile radio terminals is present in claim 1.

Further, Veerasamy, both alone and in combination with Desgagne, fails to disclose or suggest such a feature.

Instead, Veerasamy discloses only sending a geographic location of where a call is dropped. That is, Veerasamy utterly fails to disclose or suggest the information collecting server triggering a collection of information including signal strengths at geographic locations including locations where calls are not dropped.

The Desgagne Reference

All claims rejected herein stand rejected under 35 U.S.C. §103(a) over Veerasamy in view of Desgagne, or over Veerasamy in view of Desgagne and further in view of well known prior art. Applicant respectfully traverses these rejections.

The Examiner alleges that Desgagne discloses certain features of the claimed invention. Applicant submits, however, that there are features of the claimed invention which are neither disclosed nor suggested by Desgagne.

Applicant has previously traversed the Examiner's allegation with regard to Desgagne in the prior Amendments. The Examiner has again failed to provide any response to Applicant's arguments regarding Desgagne. Some of those arguments may be repeated below for the convenience and reference of the Examiner.

With regard to claim 1, Veerasamy and Desgagne fail to disclose or suggest at least "A method of collecting information used for adjustments with an information collecting server in a radio communication system connected to at least one mobile radio terminal for performing user communications, comprising: in said mobile radio terminal, monitoring a communication status of a communication connection using a traffic channel, wherein said communication status corresponds to whether or not the mobile radio terminal has an existing communication connection using the traffic channel, which satisfies predetermined criteria; detecting as a trigger when a change of said communication status has satisfied a predetermined condition; acquiring a reception status of a radio signal when said trigger is detected; acquiring a coordinate position of said mobile radio terminal; and sending information including said reception status and said coordinate position to said information collecting server," as recited in the claim.

The Examiner alleges that, *“In the same field of endeavor, Desgagne discloses measuring the signal strength of a mobile station when a call termination occurs (abstract, fig. 1-4, col. 3, lines 29-47 and col. 5, line 53 – col. 6, line 9, “measure the signal strength when the MS is ... terminating access”, “terminating access when a seized DTC is disturbed”).”* Office Action, pp. 3-4.

However, Desgagne discloses only selecting a digital traffic channel that is least likely to be disturbed, as determined by calculating an expected ratio of the carrier signal strength to the interference strength (C/I). Desgagne, Abstract and col. 2, lines 4-36. *“In order to overcome the disadvantage of existing solutions, it would be advantageous to have a method in a digital or dual-mode radio telecommunications network for improving system performance by determining the expected C/I on a seized digital traffic channel prior to utilizing the channel, and, if the expected C/I is poor, reselecting a DTC or an AVC which will provide improved voice quality.”* Desgagne, 57-63. Similar to Veerasamy, Desgagne is concerned with maintaining a reception (voice) quality in a manner intended to be seamless and transparent to the user.

Further, Desgagne at col. 5, line 53 – col. 6, line 9, clearly discloses only steps of acquiring a DTC when one is needed, either at call origin, or when a DTC currently seized by the mobile unit is determined to have a C/I ratio which meets the predetermined threshold to be considered “disturbed.” The cited passage fails to disclose or suggest call termination.

Desgagne discloses only detecting a reception characteristic. Terminating access of a particular seized DTC when switching to another DTC is clearly not analogous to a call termination. *“The process ensures that the best DTC is always utilized, and no access (either originating or terminating) is prevented by the process.”* Desgagne, col. 5, lines 56-59.

Further, Desgagne discloses that expected quality is distinguishable from signal strength. *“Total disturbance on a voice channel is, among other things, comprised of interference I, noise, and multipath propagation. Multipath propagation results from the fact that the signal from the BS is able to reach the MS partly through direct signals and partly through signals reflected from buildings, surrounding hills, and the like. The reflected signals are delayed in relation to the direct signals, and the multipath propagation results in increasing the bit error rate (BER). In D-AMPS, there is a mechanism in the MS and the BS to measure the bit error rate (BER). If the C/I is high, but the BER is also high, the high BER is most likely due to multipath propagation.”* Desgagne, col. 5, lines 21-32.

Thus, although Desgagne teaches measuring carrier signal strength C in order to calculate the C/I ratio, Desgagne fails to teach or suggest measuring signal strength when a call termination occurs, as alleged by the Examiner. Further, Desgagne fails to teach or suggest transmitting such data to an information collecting server.

The Examiner has offered no response to the above arguments. Thus, Applicant can only conclude that the Examiner agrees that Desgagne fails to disclose or suggest the recited features.

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CONCLUSION

In view of the foregoing, Applicant submits that claims 1-73, all the claims presently pending in the application, are patentably distinct over the prior art of record and are allowable, and that the application is in condition for allowance. Such action would be appreciated.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned attorney at the local telephone number listed below to discuss any other changes deemed necessary for allowance in a telephonic or personal interview.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. The Commissioner is authorized to charge any deficiency in fees, including extension of time fees, or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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